Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	27-10-2023
Team ID	Team-592312
Project Name	Car Purchase Prediction
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the Car Purchase Prediction project.	1	High	Rohit
Sprint-1	development environment	USN-2	Gather a diverse dataset of information containing different types of data(model, price) for training the machine learning model.	2	High	Rohit
Sprint-2	Data collection	USN-3	Preprocess the collected dataset by encoding categorical data and feature scaling values, and splitting it into training and validation sets.	2	High	Avrit
Sprint-2	data preprocessing	USN-4	Explore and evaluate different deep learning architectures (e.g., Random Forest,Classifiers) to select the most suitable model for Car Purchase Prediction	3	High	Avrit
Sprint-3	model development	USN-5	train the selected machine learning model using the preprocessed dataset and monitor its performance on the validation set.	4	High	Rohit
Sprint-3	Training	USN-6	implement regularization techniques and try avoiding overfitting,underfitting problems to improve the model's robustness and accuracy.	6	medium	Avrit
Sprint-4	model deployment & Integration	USN-7	deploy the trained machine learning model to make it accessible for car purchase prediction	1	medium	Avrit
Sprint-5	Testing & quality assurance	USN-8	conduct thorough testing of the model to identify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance based on user feedback and testing results.	1	medium	Rohit

Project Tracker, Velocity & Burndown Chart:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	3	3 Days	18 Oct 2023	20 Oct 2023	3	20 Oct 2023
Sprint-2	5	4 Days	21 Oct 2023	24 Oct 2023	5	24 Oct 2023
Sprint-3	10	6 Days	25 Oct 2023	30 Oct 2023		30 Oct 2023
Sprint-4	1	6 Days	31 Oct 2023	5 Nov 2023		5 Nov 2023
Sprint-5	1	4 Days	6 Nov 2023	09 Nov 2023		09 Nov 2023

Velocity:

Imagine we have a 22-days sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = 22/20 = 1.1$$

Burndown Chart:

A burndown chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/
https://www.atlassian.com/agile/tutorials/burndown-charts
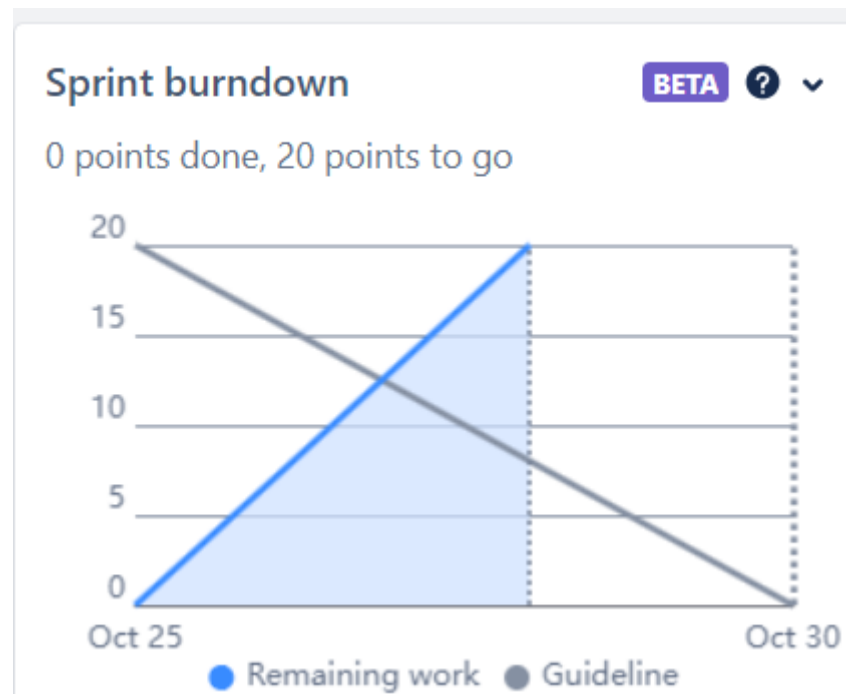
Board section.

We have completed sprint 1 and 2. So we can see the remaining tasks on board.

Backlog section

PLANNING

- Timeline
- Backlog
- Board
- + Add view

DEVELOPMENT

- Code

- Project pages
- Add shortcut
- Project settings

Projects / Car Purchase Prediction

Backlog

RB | Invite   Epic ⌄   📈 Insights   ⚙ View settings

Epic	✕

Issues without epic

- › ◼ Project setup,Infrastructure and development environment

- › ◼ Data collection and preprocessing

- › ◼ Model development and training

- › ◼ model deployment & Integration

- › ◼ Testing & quality assurance

+ Create epic

⌄ **Sprint 3** 25 Oct – 30 Oct (2 issues)   6 ④ ⓪ Complete sprint •••

📗 CPP-14 train the selected machine learning model using the preprocessed dataset and monitor its performance on the validation set.   MODEL DEVELOPMENT ...   IN PROGRESS ⌄   4   ═ RB

📗 CPP-15 implement regularization techniques and try avoiding overfitting,underfitting problems to improve the model's robustness and accuracy.   MODEL DEVELOPMENT ...   TO DO ⌄   6   ═ 👤

+ Create issue

⌄ **Sprint 4** 31 Oct – 5 Nov (1 issue)   1 ⓪ ⓪ Complete sprint •••

📗 CPP-18 deploy the trained machine learning model to make it accessible for car purchase prediction   MODEL DEPLOYMENT ...   TO DO ⌄   1   👤

+ Create issue

⌄ **Sprint 5** 6 Nov – 9 Nov (1 issue)   1 ⓪ ⓪ Complete sprint •••

📗 CPP-20 conduct thorough testing of the model to identify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance ba...   TESTING & QUALITY AS...   TO DO ⌄   1   RB
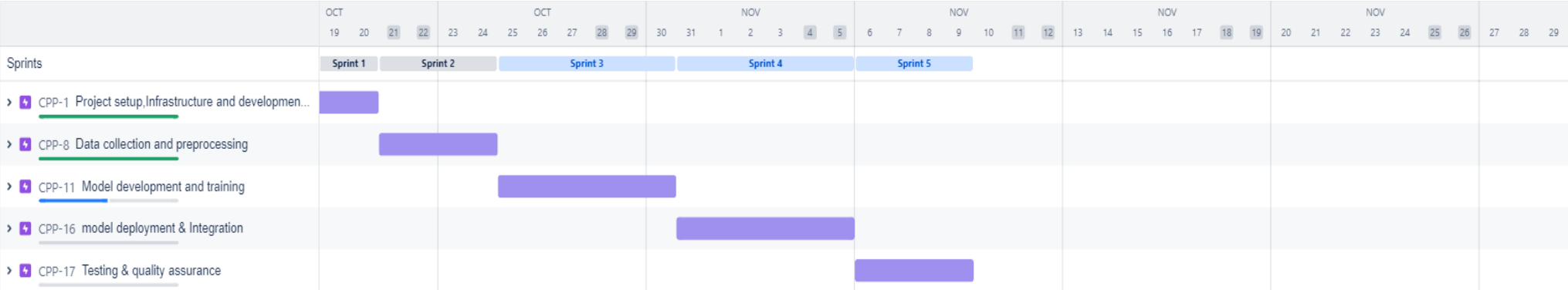
+ Create issue

Timeline

	OCT				OCT							NOV						NOV						NOV						NOV				
	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29

Sprints	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5

CPP-1 Project setup,Infrastructure and developmen...

CPP-8 Data collection and preprocessing

CPP-11 Model development and training

CPP-16 model deployment & Integration

CPP-17 Testing & quality assurance

THANK YOU